



April 1, 2005

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Mr. Craig Hunt Regional Water Quality Control Board North Coast Region 5550 Skylane Boulevard, Suite A Santa Rosa, CA 94503-2097

RE: Quarterly Groundwater Monitoring Results Report, First Quarter 2005 Former Unocal Bulk Plant No. 0813

122 Leslie Street, Ukiah California RWQCB No. 1NMC405

Dear Mr. Hunt:

ENSR Corporation (ENSR) has been authorized by Union Oil Company of California (Unocal) to perform quarterly groundwater monitoring at the site located at 122 Leslie Street, Ukiah, California (**Figure 1**). The site is a former bulk plant with a chain link fence around its perimeter. The locations of former and current site features are illustrated on **Figure 2**. Quarterly groundwater monitoring is intended to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the site. This report summarizes results of the samples collected from the site during the first quarter 2005. The work was performed in accordance with the field methods and procedures included in **Attachment A**.

Groundwater Level Measurements

Depth to groundwater levels were measured in monitoring wells MW-1 through MW-9 on February 11, 2005 and are presented in **Table 1**. The groundwater elevations were used to construct a groundwater elevation contour map included as **Figure 3**. The groundwater flow direction was generally southeast with an average hydraulic gradient of approximately 0.006 feet per foot (ft/ft). Copies of the groundwater sampling information sheets are included in **Attachment B**. A summary of groundwater elevations measured to date is presented in **Table 1**.

Groundwater Sampling and Analytical Results

Groundwater samples were collected from monitoring wells MW-1 through MW-9 on February 11, 2005. Groundwater samples were submitted to California Laboratory Services in Rancho Cordova, California (a state-certified laboratory) under chain of custody protocol. Samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M, total recoverable petroleum hydrocarbons (TRPH) as oil and grease by EPA Method 1664, and total lead by EPA Method 200.7 or 200.8.



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Cumulative groundwater sampling results are summarized in **Table 1**. A map depicting dissolved concentrations of TPHg, TPHd, and benzene in groundwater for the first quarter 2005 is included as **Figure 4**. A copy of the certified laboratory analytical report with chain-of-custody documentation is included in **Attachment C**.

Conclusions/Recommendations

Elevated levels of TPHd continue to be detected in monitoring wells MW-1, MW-2, and MW-3 with a maximum concentration of 11,000 micrograms per liter (μ g/L) in MW-1. TPHg continues to be detected in monitoring wells MW-1 and MW-2 with a maximum concentration of 610 μ g/L in MW-1. Benzene concentrations were not detected above the laboratory reporting limits in any monitoring wells sampled during the first quarter 2005 event.

ENSR recommends that the monitoring and sampling of groundwater at the site should continue.

Future Work

The next quarterly groundwater monitoring and sampling event is scheduled for May 2005.

In a letter dated November 20, 2003, the Regional Water Quality Control Board, North Coast Region (RWQCB) approved a Corrective Action Plan prepared by Environmental Resolutions, Inc. (ERI) dated June 18, 2003. On May 20, 2004, the (RWQCB) verbally approved a remedial design plan (RDP) prepared by ERI and reviewed by ENSR dated February 3, 2004, for the subject site. The approved remedial options were ozone microsparging (C-Sparge™) and soil vapor extraction (SVE).

In late July 2003, ERI installed the nine C-Sparge/SVE wells associated with the remediation system at the site. Upon review of the completion depths of the C-Sparge/SVE wells, ENSR feels that the C-Sparge wells may be set too deep to effectively remediate the groundwater beneath the site. In a telephone conversation with the RWQCB on October 14, 2004, ENSR proposed collecting groundwater samples from selected on-site C-Sparge wells for chemical analysis to determine if the groundwater has been impacted at the screened interval depths (approximately 32 to 35 feet below ground surface) of the C-Sparge wells. Based on the analytical results, ENSR submitted a *Revised Remedial Design Plan* dated December 7, 2004. Following agency approval, ENSR will schedule and begin implementation of the RDP.

In January 2005, ENSR received approved permits to install the additional nine sparge wells and permits associated with the ozone system installation including encroachment, building, and electrical and a business license. The nine additional sparge wells were installed during the week of January 10, 2005.



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Following the installation of the new air sparge wells, ENSR conducted an ozone generator pressure test with the equipment manufacturer to determine the source of the leak found in the ozone generator. The source of leak was found by the manufacturer, and repaired. ENSR is currently in the final stages of construction of the ozone sparging system. Startup testing and subsequent full-scale system operation is planned for mid-April 2005. Startup testing will be conducted according to the Water Quality Sampling and Analysis Plan/Ozone Sparging Startup Testing Plan submitted to the RWQCB on December 29, 2004.

Remarks/Signatures

The interpretations in this report represent our professional opinions and are based, in part, on the information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended. If you have any questions regarding this project, please contact Paul Wadding at (916) 362-7100.

Sincerely,

ENSR Corporation

Paul R. Wadding, P.E.

Project Manager

John M. Warren, R.C.E. No. 34168

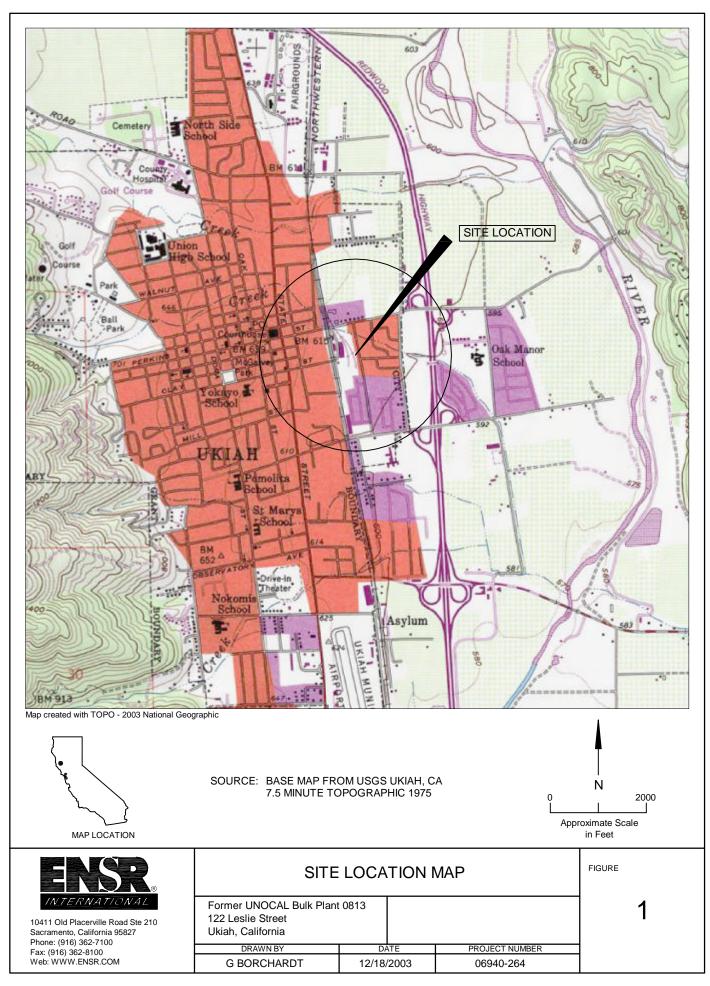
Senior Program Manager

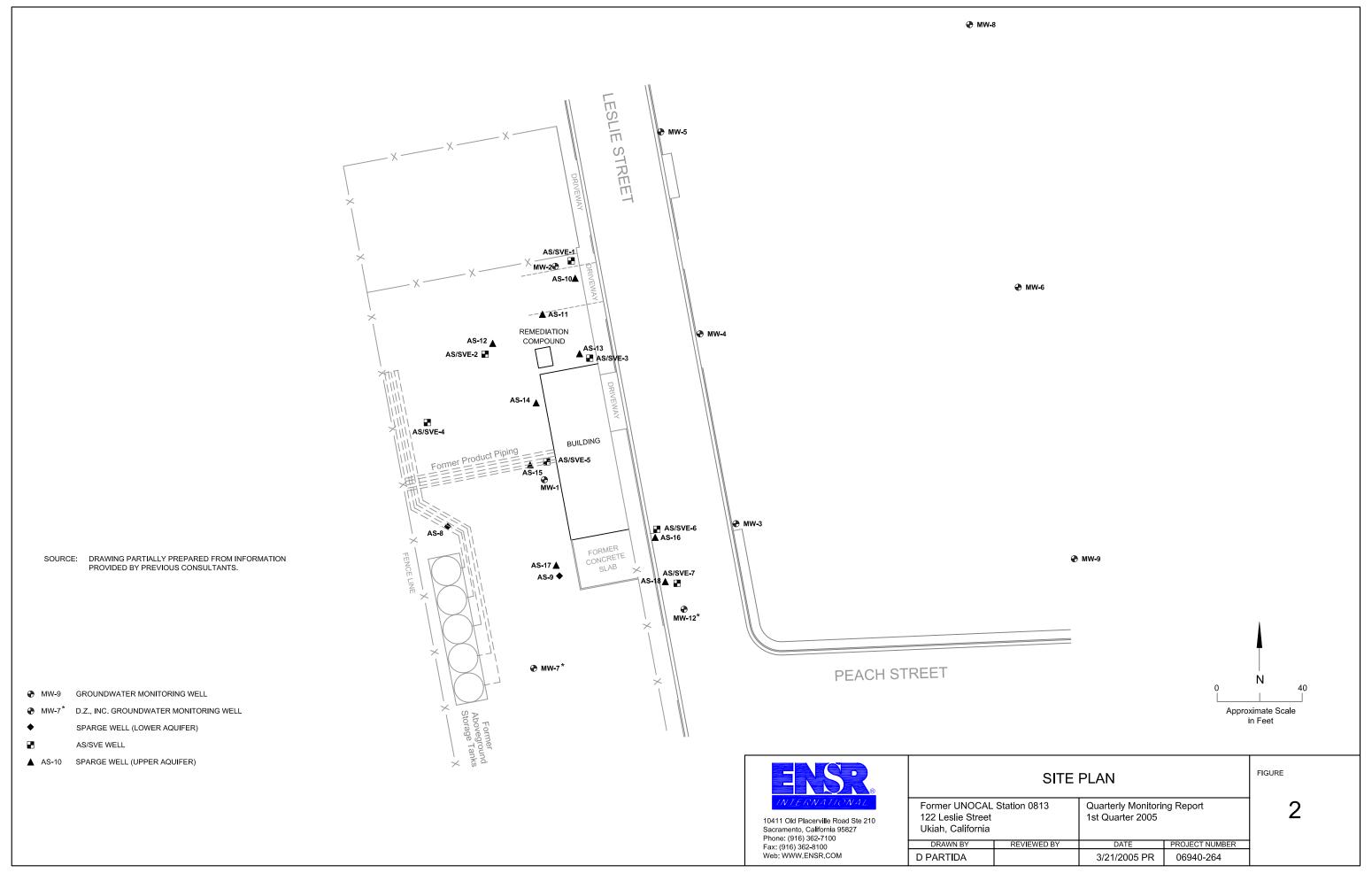
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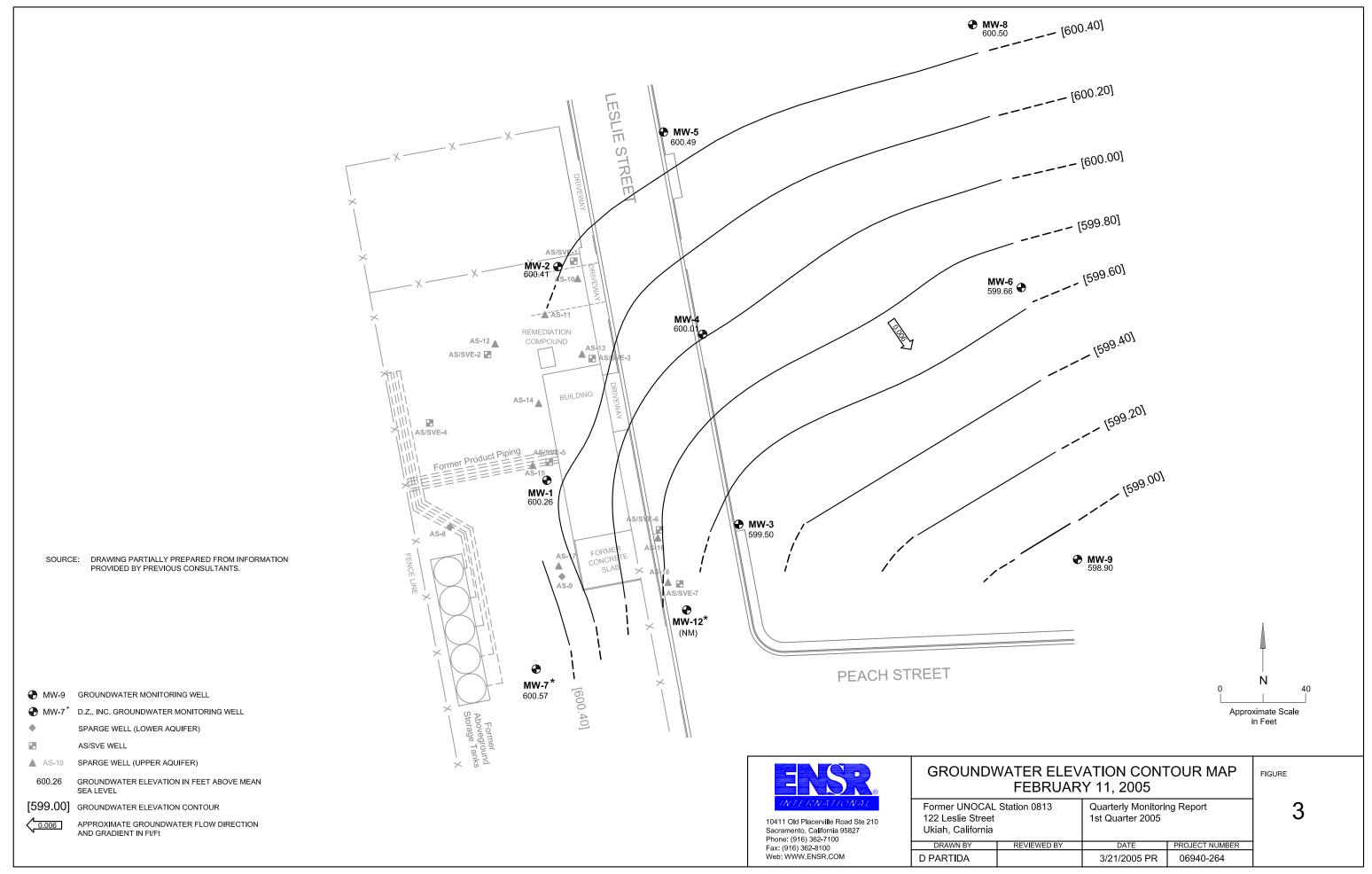
Ref. 06940-264-100

Attachments

cc: Mr. John Frary, Union Oil Company of California







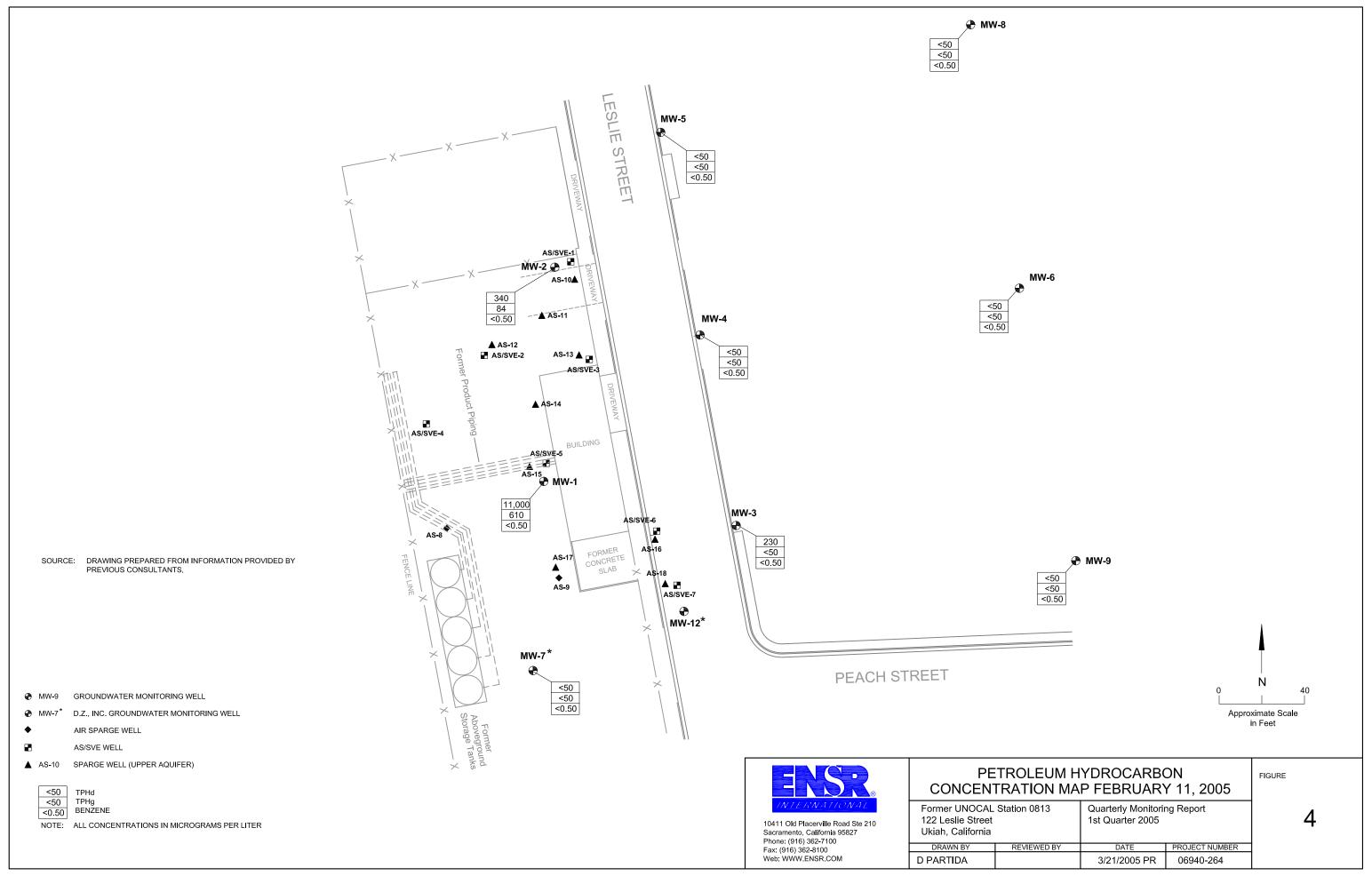


Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*(ft.)	DATE	DTW (<i>ft</i> .)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (<i>ug/L</i>)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-1												
607.93	08/07/02 ¹	16.11	591.82	1,400	370 ²	<0.50	<0.50	1.3	< 0.50	<75	<5,000	
	11/13/02	17.35	590.58	1,500	740	< 0.50	< 0.50	6.7	< 0.50	<75	<5,000	
	02/28/03	7.26	600.67	1,100	89	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	4.29	603.64	570	640	< 0.50	< 0.50	1.8	< 0.50	<75	<5,000	
	08/21/03	13.93	594.00	690	180	1.5	< 0.50	0.87	2.1	<50	<5,000	
	11/13/03	20.25	587.68	3,100	410	< 0.50	< 0.50	0.64	< 0.50	<75	<5,000	
	03/15/04	6.65	601.28	4,900	230 4	< 0.50	< 0.50	< 0.50	2.0	7.6	<5,000	
	05/19/04	10.50	597.43	8,600	720	< 0.50	< 0.50	3.8	3.7	9.0	5,000	
	08/11/04	16.81	591.12	25,000	470 ⁴	1.4	<1.0 ⁶	2.2	4.5	15	<5,000	
	11/11/04	17.73	590.20	5,500	750 ⁴	1.3	4.1	11	6.4	6.8	<5,000	
	02/11/05	7.67	600.26	11,000	610 ⁴	<0.50	0.62	2.5	3.4	<5.0	<5,000	
MW-2												
607.78	08/07/02 ¹	17.35	590.43	260	170 ²	< 0.50	< 0.50	0.91	< 0.50	<75	<5,000	
	11/13/02	20.23	587.55	2,100	1,200	<1.0	<1.0	19	<1.0	<75	<5,000	
	02/28/03	7.55	600.23	1,500	330	< 0.50	< 0.50	2.4	0.57	<75	<5,000	
	04/30/03	4.87	602.91	1,500	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,100	
	08/21/03	14.54	593.24	$3,100^2$	160	< 0.50	0.60	1.1	4.0	<50	<5,000	
	11/13/03	21.04	586.74	450	160	<0.50	< 0.50	0.67	< 0.50	<75	<5,000	
	03/15/04	7.13	600.65	500	57 ⁴	<0.50	<0.50	<0.50	<1.0	8.4	<5,000	
	05/19/04	10.77	597.01	640	72	<0.50	< 0.50	1.7	2.9	6.9	<5,000	
	08/11/04	18.00	589.78	1,300	69 ⁴	<0.50	<0.50	0.88	2.0	12	<5,000	
	11/11/04	20.08	587.70	240	94 ⁴	<0.50	0.99	2.0	2.5	<5.0	<5,000	
	02/11/05	7.37	600.41	340	84 ⁴	<0.50	0.87	1.5	<1.0	<5.0	<5,000	

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Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
100 ()1.)		()1.)	(msi)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(<i>ug/L</i>)	(mg/L)
MW-3												
607.14	08/07/02 ¹	17.29	589.85	28,000	$1,300^2$	<0.50	< 0.50	7.8	<0.50	360	5,300	
	11/13/02	20.73	586.41	9,100	570	<5.0	<5.0	<5.0	< 5.0	<75	5,400	
	02/28/03	7.78	599.36	220	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	5.04	602.10	420	56	< 0.50	< 0.50	1.0	< 0.50	<75	<5,000	
	08/21/03	14.45	592.69	460	71	1.6	< 0.50	<0.50	1.1	<50	<5,000	
	11/13/03	21.45	585.69	1,300	260	2.4	< 0.50	< 0.50	< 0.50	<75	<5,000	
	03/15/04	7.38	599.76	360	87	0.71	< 0.50	<0.50	<1.0	<5.0	<5,000	
	05/19/04	10.90	596.24	430	110	< 0.50	0.74	0.99	<1.0	<5.0	<5,000	
	08/11/04	17.88	589.26	1,200	140 ⁴	< 0.50	0.56	1.3	2.4	<5.0	<5,000	
	11/11/04	20.30	586.84	1,900	310 ⁴	0.77	1.1	5.6	4.5	<5.0	<5,000	
	02/11/05	7.64	599.50	230	<50	<0.50	0.59	0.82	<1.0	<5.0	<5,000	
MW-4												
607.29	08/07/02 ¹	17.16	590.13	69	<50	<0.50	< 0.50	<0.50	<0.50	540	<5,000	
	11/13/02	20.35	586.94	130	<50	<0.50	< 0.50	<0.50	<0.50	<75	<5,000	
	02/28/03	7.49	599.80	240	<50	<0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	4.82	602.47	240	<50	<0.50	< 0.50	<0.50	< 0.50	<75	<5,100	
	08/21/03	14.54	592.75	120 ²	<50	< 0.50	< 0.50	< 0.50	< 0.50	<50	<5,000	
	11/13/03	21.25	586.04	NS*	NS*	NS*	NS*	NS*	NS*	NS*	NS*	NS*
	03/15/04	7.02	600.27	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
	05/19/04	10.60	596.69	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	08/11/04	17.77	589.52	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	11/11/04	20.00	587.29	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	02/11/05	7.28	600.01	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	

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MW-5												
607.64	08/07/02 ¹	17.33	590.31	4,100	210 ²	<0.50	<0.50	<0.50	< 0.50	310	<5,000	
	11/13/02	20.38	587.26	1,100	74	<0.50	<0.50	<0.50	< 0.50	<75	<5,000	
	02/28/03	7.39	600.25	6,300	<50	<0.50	< 0.50	<0.50	< 0.50	<75	11,000	
	04/30/03	4.81	602.83	3,700	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	6,600	
	08/21/03	14.44	593.20	880 ²	<50	< 0.50	< 0.50	< 0.50	< 0.50	<50	<5,000	
	11/13/03	21.15	586.49	30,000	61	< 0.50	< 0.50	< 0.50	< 0.50	130	7,300	
	03/15/04	6.92	600.72	1,600 ⁵	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	05/19/04	10.58	597.06	<50	<50	< 0.50	< 0.50	0.53	1.0	<5.0	17,000	
	08/11/04	17.92	589.72	8,800 ⁵	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	11/11/04	20.02	587.62	4,800 ⁵	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	02/11/05	7.15	600.49	<50	<50	<0.50	<0.50	<0.50	<1.0	5.3	<5,000	
MW-6												
606.60	08/07/02 ¹	16.75	589.85	< 50 ³	<50	< 0.50	< 0.50	< 0.50	< 0.50	260	<5,000	
	11/13/02	20.57	586.03	<50	<50	<0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	02/28/03	7.10	599.50	<50	<50	< 0.50	<0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	4.70	601.90	72	<50	<0.50	< 0.50	< 0.50	< 0.50	<75	<5,200	
	08/21/03	13.88	592.72	<50	<50	<0.50	<0.50	< 0.50	< 0.50	<50	<5,000	
	11/13/03	21.00	585.60	230	<50	<0.50	<0.50	<0.50	<0.50	190	<5,000	3.08
	03/15/04	6.66	599.94	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
	05/19/04	10.15	596.45	<50	<50	<0.50	0.56	0.73	2.0	<5.0	<5,000	
	08/11/04	17.32	589.28	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
	11/11/04	19.72	586.88	<50	<50	<0.50	<0.50	<0.50	<1.0	8.3	<5,000	
	02/11/05	6.94	599.66	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
100 (1.1)		U ···/	(IIIII)	(118, 22)	(**8,2)	(4.8, 2)	(**8,2)	(118,2)	(118/22)	(**8,2)	(4.8, 2.)	(1118,22)
MW-7												
607.29	08/07/02 ¹	15.50	591.79	56	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	11/13/02	16.58	590.71	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	02/28/03	6.93	600.36	66	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	3.77	603.52	64	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,200	
	08/21/03	13.39	593.90	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<50	<5,000	
	11/13/03	19.60	587.69	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	0.83
	03/15/04	6.36	600.93	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	05/19/04	10.10	597.19	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	08/11/04	16.18	591.11	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	11/11/04	17.05	590.24	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	02/11/05	6.72	600.57	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
MW-8												
606.53	08/07/02 ¹	16.30	590.23	< 50 ³	<50	< 0.50	< 0.50	< 0.50	< 0.50	190	<5,000	
	11/13/02	20.15	586.38	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	02/28/03	6.18	600.35	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	04/30/03	3.98	602.55	59	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	08/21/03	13.33	593.20	<50	<50	< 0.50	0.56	< 0.50	< 0.50	<50	<5,000	
	11/13/03	20.60	585.93	140	<50	< 0.50	< 0.50	< 0.50	< 0.50	<75	<5,000	
	03/15/04	5.72	600.81	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0	<5,000	
	05/19/04	9.40	597.13	<50	<50	< 0.50	< 0.50	0.66	1.9	<5.0	<5,000	
	08/11/04	16.85	589.68	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	11/11/04	19.07	587.46	<50	<50	< 0.50	< 0.50	< 0.50	<1.0	<5.0	<5,000	
	02/11/05	6.03	600.50	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-9	08/21/03 ¹	14.25	592.42	<50	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	1.7
606.67	11/13/03	21.45	585.22	55	<50	<0.50	<0.50	<0.50	< 0.50	79	<5,000	
	03/15/04	7.50	599.17	<50	<50	<0.50	<0.50	<0.50	< 0.50	<5.0	<5,000	
	05/19/04	10.78	595.89	<50	<50	0.94	0.77	0.95	3.2	<5.0	<5,000	
	08/11/04	17.67	589.00	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
	11/11/04	20.23	586.44	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	
	02/11/05	7.77	598.90	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<5,000	
MW-12 607.33	NOT MONIT	ORED/NOT	SAMPLED									
Trip Blank												
QA	08/07/02				<50	<0.50	<0.50	< 0.50	<0.50			
	11/13/02				<50	<0.50	<0.50	< 0.50	< 0.50			
	02/28/03				<50	<0.50	<0.50	< 0.50	< 0.50			
	04/30/03				<50	<0.50	<0.50	< 0.50	< 0.50			
	08/21/03				<50	< 0.50	< 0.50	< 0.50	< 0.50			
	11/13/03				<50	< 0.50	< 0.50	< 0.50	< 0.50			
	05/19/04				<50	< 0.50	<0.50	< 0.50	< 0.50			
	08/11/04				<50	< 0.50	< 0.50	< 0.50	<1.0			
	11/11/04				<50	< 0.50	< 0.50	< 0.50	<1.0			
	02/11/05				<50	<0.50	<0.50	<0.50	<1.0			

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 0813 122 Leslie Street Ukiah, California

EXPLANATIONS:

TOC = Top of Casing

TPHg = Total Petroleum Hydrocarbons as Gasoline

TOG = Total Oil and Grease

DTW = Depth to Water

B = Benzene

(ppb) = Parts per billion

(ft.) = FeetT = Toluene--- = Not Measured/Not AnalyzedGWE = Groundwater ElevationE = EthylbenzeneQA = Quality Assurance/Trip Blank(msl) = Mean sea levelX = XylenesD.O. = Dissolved Oxygen

TPHd = Total Petroleum Hydrocarbons as Diesel

T. Lead = Total Lead

mg/L = Milligrams per liter

NS* Unable to access well due to parked car

- * TOC elevation for MW-9 was surveyed September 4, 2003, by Morrow Surveying, Inc. referencing the previous benchmark. TOC elevations are referenced to msl, and were surveyed June 24, 2002, by Morrow Surveying, Inc. The benchmark used for the survey was a City of Ukiah benchmark.
- Well development performed.
- ² Laboratory report indicates a hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- ³ Laboratory report indicates no sample remained for re-extraction.
- ⁴ Although sample contains compounds in the retention time range associated gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
- Although sample contains compounds in the retention time range associated diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
- ⁶ The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

ATTACHMENT A FIELD METHODS AND PROCEDURES

FIELD METHODS AND PROCEDURES

The following section describes field procedures that are to be used by ENSR personnel in the performance of the tasks involved with this project.

1. HEALTH AND SAFETY PLAN

Fieldwork performed by ENSR and ENSR's subcontractors at the site will be conducted according to guidelines established in a Health And Safety Plan (HASP). The HASP is a document that describes the hazards that may be encountered in the field and specifies protective equipment, work procedures and emergency information. A copy of the HASP will be at the site and available for reference by appropriate parties during work at the site.

2. GROUNDWATER DEPTH ASSESSMENT

A water/product interface probe is used to assess the liquid-phase hydrocarbons (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for LPH sheen.

3. SUBJECTIVE ANALYSIS OF GROUNDWATER

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

4. MONITORING WELL SAMPLING

Monitoring wells are purged using a pump or bailer until pH, temperature and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. The purge water is placed in 55-gallon drums and temporarily stored on-site pending evaluation of disposal options. If three well volumes cannot be removed in one-half an hour's time, the well is allowed to recharge to 80 percent of original level. After recharging, a groundwater sample is then removed from each of the wells using a pump or disposable bailer. The water sample is collected, labeled and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to the accepted regulatory method pertaining to the site.

5. QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed by ENSR throughout the investigation.

5.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample will be collected in the appropriate container, preserved correctly for the intended analysis and stored, prior to analysis, for no longer than the maximum allowable holding time.

Details on the procedures for collection and handling of soil samples from this project can be found in previous sections.

5.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection and a sample number unique to that sample. During soil sampling, this information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel and any other pertinent field observations will be recorded on the borehole log or in the field records.

ATTACHMENT B GROUNDWATER SAMPLING INFORMATION DATA



GROUNDWATER/LIQUID LEVEL DATA (measurements in feet below TOC)

Site Address:

122 Leslie St., Ukiah, CA

ENSR No.

06940-264-100

Unocal No.

813

Date:

2/11/05

Recorded by:

Tanya Ahoval

Sampling Order/ Well No.	Time Opened	CGI	PID	O2	Time Measured	Depth to Gr. Water	Measured Total Depth	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-9	1240	N/A	N/A	HIA	1315	7.77	24.61	8	0	TAKE D.O. READING
MW-6	1242				1314	6.94	23.41	2	.	
MW-8	1244		./-		1318	6.03	24.79	0	0	
MW-7	1223				1323	6.72	24.58	0	-0	
MW-4	1234				1327	7.28	25.91	0	0	
MW-3	1235				1329	7.64	25.91	0	0	
MW-2	1226				1330	7.37	24.29	Θ	0	
MW-5	1232				1332	-7.15	23.39	0	0	
MW-1	1225	\	1	\	1334	7.67	24.11	0	0	
MW-12	NA	NA	NA	NA	NA	NA	NA		ender Truck	DO NOT SAMPLE

Notes:

	ATER SAMPLING		Τ	Well/Piezo ID:	MW-9					
ENSR No. Unocal No.	: 122 Leslie St., U 06940-264-100 813	JKIAN, CA		Well 🛣	Piezometer					
Well Purging	= 2/11/05	0	\	Field Tech(s):_	Tanya	Ahovel		_		
Purge Metho	d: Disposable bai	ler/other	raill	_ Weather Condi	tions: 50	y 8013		_		
Casing Mater		pvo								
Well Diamete	er:	2.00						7		
Total Depth:			ft from TOC	Volume	3/4" = 0.02 1" = 0.04			(11.13)		
Depth to Wat		16.84	ft from TOC	Factor (VF)	4" = .66 5" = 1.02	6" = 1.50 12" = 5.80] (11 > >		
Water Colum Water Colum			. π. . gal (WC X VF)	80% Recovery	from TOC: = Total D	enth - (Water Colur	nn X 8\=	9.430 143	37	
Water Colum	Treatment	<i>5</i> , <i>6</i>	gar(VVOXVI)	00 % Necovery	nom roo rotar b	epiii - (Water Colui	IIII X .0) –	1 - 7 - 0		
Time	Volume	DO	Redox	Temperature		рН	Turbidity	Color/Clarity	Other	Other
	Removed		Potential (ORP)		Conductivity					
1 2000	(gal)	(mg/L)	(mVolts)	(°C)	(uS/cm)		(NTUs)			
1470	0 /15	9,0	250.	15/1	23.3	7.7	140	allar		
1933	1 2.75	7.3	768	14.9	20.9	6.7	150			
1435	25.7	7.1	245	15.1	20-0	4.5	400			
1437	3 8 0	8.0	825	15.0	20.1	60.4	500			
7.	4					*				
										1
								1 1		
Sample Colle Date Sample Sampling Me Sample Type	ection: d: 2/11/09 thod: Disposable : Grab	Bailer/Other_	Bailed	.,						
	# of containers	Cont	ainer Type	Preservation		****	Analysis		*	Time
mw9	3		-mL VOA	Ice/HCl	TPHg (8015) BTEX	((8021)				1440
	1	1-	L Amber	None	TRPH (1664)		·			
	1	250-	mL Amber	None	TPHd (8015M)					
	11	500)-mL Poly	HNO3	Total Lead (6010)					
Comments _									(/5	(8.08)
			· · · · · · · · · · · · · · · · · · ·			_			1-1-1-1	
Signature <u></u>	Jan 3	- ahou	<u>al_</u>	$_{\rm Date}$ $2/i$	1/05					
_			National Property of the Parket							

Site Address: ENSR No. Unocal No. Well Purging	f: Disposable bail ial: r: er:	Rer/other	in. ft from TOC ft from TOC	Volume Factor (VF)	Piezometer	2" = .16 3" = .38 6" = 1.50 12" = 5.80		-	3)	
Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1503		9.8	724	137	19.5	6.8	300			
1305	1 2.8	R.S	234	13.4	18.9	6.5	450			
1507	2 Sr 4	7.9	736	13.4	18-9	ĞŞ	470			
1509	3 8.00	8.6	238	/3.3	18-9	(0.5	730			
	4				,				1	
					ļ		<u> </u>			
							<u> </u>			
Sample Colle Date Sampled Sampling Met Sample Type:	ection: d:/((\ O hod: Disposable Grab	Sailer/Other_	Bailed				J	-		
Sample ID	# of containers	Conta	ainer Type	Preservation		.,	Analysis			Time
mw-6	3	40-	mL VOA	Ice/HCI	TPHg (8015) BTEX	((8021)				15 14
	11			None	TRPH (1664)					
\vdash	1			None	TPHd (8015M)					
	1	500	-mL Poly	HNO3	Total Lead (6010)					
					-					
Comments _	MW-0 TOCKER II	Maral		Date 2/	(1/05			0	Jol (7.	9)
J.g. Id. Id.	- O-	My marks								

Site Address: ENSR No. Unocal No. Well Purging Date Purged: Purge Method Casing Mater Well Diamete Total Depth: Depth to Wat Water Colum	d: 2/11/05 d: Disposable bail fial: er:	ler/other	in. of from TOC of from TOC	Volume Factor (VF)	Piezometer Tanya tions: Sunnu 3/4" = 0.02 1" = 0.04	2" = 18 3" = .38 6" = 1.50 12" = 5.80		- -](9.78)		
Time	Volume Removed	DO	Redox Potential (ORP)	Temperature	Specific Conductivity	pH	Turbidity	Color/Clarity	Other	Other
	(gal)	(mg/L)	(mVolts)	(°C)	(uS/cm)		(NTUs)			
1522	0 1.0	10.2	235	17.5	20.2	6-7	230			
1525	1 4.0	88	200	12.9	19.5	6.5	560			
1528	2 7-0	81	262	17.8	19.5	64	620			
1531	3/0:0	8.0	265	1,3:1	19.7	Co.4	C140.			۶
	4	0								
									· · · · · · · · · · · · · · · · · · ·	
Sampling Met Sample Type:	thod: Disposable	Bailer/Other_	Balled ainer Type	Preservation			Anglycia			Time
INU 8					TDU = (0045) DT5)		Analysis			
mo 8	3		-mL VOA	ice/HCI	TPHg (8015) BTEX	(0021)				1532
 (1		L Amber	None	TRPH (1664)					
	11		mL Amber	None	TPHd (8015M)					
	11	500)-mL Poly	HNO3	Total Lead (6010)					
										L
Comments _									Uol	(9.0)
0:	1 1	Ohm	1	2/	u/05					

Site Address: ENSR No. Unocal No. Well Purging	d: Disposable bai	Jkiah, CA	in. ft from TOC ft from TOC ft.	 - \ -	Well/Piezo ID: Well X Field Tech(s): Weather Condit /olume Factor (VF)	Piezometer A M Ch itions: 3/4" = 0.02 1" = 0.04 4" = .66 5" = 1.02	2" = .16 3" = .38 6" = 1.50 12" = 5.80		-](1029) 6,94)	
Time	Volume Removed	DO	gal (WC X VF) Redox Potential (ORP)		Temperature	from TOC: = Total Di Specific Conductivity	eptn - (water Colun	Turbidity	Color/Clarity	Other	Other
	(gal)	(mg/L)	(mVolts)	,	(°C)	(uS/cm)		(NTUs)			
1814	0 5	9.0	1119	\neg	14.1	20.1	6.5	10			
18/16	1 15	7.1	120	\dashv	14.9	20.6	10.10	21			
18/19	2 2 9	6,9	1110		15.0	19.8	4.4	6.8	 		
1819				-		19.8	(0.10	- 4			
1814	3 310	7,2	118	-	15.1	(0). 5	(p, 0	180			
	4						•		l		
		Ĺ									
											1
				\neg					 		
Sampling Met Sample Type:	d: 2/1/05 thod: Disposable : Grab	Bailer/Other_	Bailed								
	# of containers		ainer Type		Preservation			Analysis			Time
mw7	3	40-	mL VOA	Ice/l	HCI	TPHg (8015) BTEX	(8021)				1821
	1	1-l	Amber	Non	e	TRPH (1664)					(
}	1	250-	mL Amber	None	e	TPHd (8015M)					
	1	_	-mL Poly	HNC		Total Lead (6010)					
	 		-IIIL I OIY	1111	,,,	Total Lead (0010)					
											
Comments _									Vol	(35.	. 0
Signature	June J	alhor	hah		Date	11105	- Andrew Control of the Control of t				

Site Address: ENSR No. (Unocal No. (Well Purging:	Disposable bail	2.00 25.91 7.28	in. ft from TOC ft from TOC	Volume Factor (VF)	Piezometer ☐	2" = .16 3" = .38 6" = 1.50 12" = 5.80		-] (11.60) 8.14		
Time	Volume	DO	Redox	Temperature	Specific	pН	Turbidity	Color/Clarity	Other	Other
	Removed (gal)	(mg/L)	Potential (ORP) (mVolts)	(°C)	Conductivity (uS/cm)		(NTUs)			
1341	1.0	7.6	276	139	1 275	6.3	93			
1544	3.0	45	270	(700	28.6	(0.3	150			
1,207	(0-0)	2.1	368	170	28.0	(6.2	120	 		1
1336	8.0	30		17.0		(c. 2-		 		
12 70 3	1-0	2.0	269	17.0	28.0	Co. 2-	160	ļ		
	<u> </u>						 _			
Sample Type: 0	od: Disposable	Bailer/Other_	Bailed ainer Type	Preservation			Analysis	۸		Time
MVD4					TDU ~ (9045) DTC		Arialysis			1551
1 1 1	3 1		ML VOA	Ice/HCI	TPHg (8015) BTEX	(0021)	· · · · · · · · · · · · · · · · · · ·			1 2 7 1
			_ Amber	None	TRPH (1664)					
 	1		mL Amber	None	TPHd (8015M)			Set "		
	1	500	-mL Poly	HNO3	Total Lead (6010)					
Comments									Ual	(8.9)
Signature	fa	house		Date_ 2/	u (05					



	· e									
	TER SAMPLING : 122 Leslie St., U 06940-264-100		ET	Well/Piezo ID:	MW-3 Piezometer					
Unocal No.				AAGII 🖂	Piezometei 🔲					
Well Purging	2/11/05		,	Field Tech(s):	Tanya f ions: Sunny	hoval				
Date Purged:	2/11/0>		30,101			1 ANC				
Purge Method	d: Disposable bail		- area	_ Weather Condit	ions:	705		-		
Casing Mater Well Diamete		PVC 2.00	_) in.							
Total Depth:			ft from TOC	Volume	3/4" = 0.02 1" = 0.04	2" = .16 3" = .38] , , , , , , .	\	
Depth to Wat		1.64	ft from TOC	Factor (VF)	4" = .66 5" = 1.02	6" = 1.50 12" = 5.80)	(11.29)	
Water Colum Water Colum		2.9	_ ft. _ gal (WC X VF)	80% Recovery f	from TOC: = Total De	epth - (Water Colu	mn X .8) =	8.21		
Time	Volume Removed	DO	Redox Potential (ORP)		Specific Conductivity	рH	Turbidity	Color/Clarity	Other	Other
	(gai)	(mg/L)	(mVolts)	(°C)	(uS/cm)		(NTUs)			
1603	0 1.0	8.8	275	175	38-1	Vis	63			
1605	1 30	4.3	273	17.6	34.2	(0.5	181			
1607	2 6.0	52	274	17.4	38.7	.64	791			1
1609	3 9.0	6.7	207	17.1	425	6.8	600		, i	The second
100	4								1 P	
			1							
					<u></u>		<u> </u>			
Sampling Met	ection: d: 2/11/09 thod: Disposable I : Grab	Bailer/Other_	Called tainer Type	Preservation			Analysis			Time
mw3	3		-mL VOA	Ice/HCI	TPHg (8015) BTEX	(9021)	Allalysis	***		16/6
1	1 1		L Amber	None	TRPH (1664)	(0021)				1010
	1		-mL Amber	None	TPHd (8015M)					 (
1	1		0-mL Poly	HNO3	Total Lead (6010)					
	<u> </u>		J AIL I OIY	7,1100	Total Load (0010)	··				
							·			
Comments _									Uel	(8.7)
						,				
	0	ΔT -								
Signature	James 21	Chonal	<i>a.</i>	Date 2/1	1/05					

Site Address:	TER SAMPLING 122 Leslie St., U 06940-264-100 813		т	Well/Piezo ID:	Piezometer	,				
Well Purging Date Purged: Purge Method		ler/other	ruled	Field Tech(s):_	Tanya Al tions: Dus K	20060	2,2	- -		
Casing Materi Well Diameter Total Depth: Depth to Water Water Column Water Column	r: er:	7.37	ft from TOC ft from TOC	Volume Factor (VF) 80% Recovery	3/4" = 0.02 1" = 0.04 4" = .66 5" = 1.02 from TOC: = Total D	6" = 1.50 12" = 5.80	****] (10.75) ?.1 2	>	
Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	рH	Turbidity (NTUs)	Color/Clarity	Other	Other
16:59	0 / 0	3,5	20	1/60	29.2	1.2	340	1		
17:01	1 2.8	2.5	-19	161	39.2	6.3	310			
1704	2,5,5	1.9	-1	1000	29.3	7.3	290			
1707	3 8,2	1.2	-10	15.4	29.4	6:3	270			
, , , , ,	4	1-1		- / - J - F -	"	10	100	 		
Sampling Meth Sample Type:		Bailer/Other_	Buled							
	# of containers		ainer Type	Preservation			Analysis			Time
mw-2	3		mL VOA	Ice/HCI	TPHg (8015) BTEX	((8021)				1708
\vdash	1		_ Amber	None	TRPH (1664)					
	11		mL Amber	None	TPHd (8015M)					
	1	500	-mL Poly	HNO3	Total Lead (6010)					
L										
Comments		<u>e</u> .								101 (8.1)
Signature	Tompe J	ahora	k	Date 7	11/65					

	•									
	ATER SAMPLING : 122 Leslie St., U 06940-264-100 813	Jkiah, CA	ĒΤ	Well/Piezo ID:	MW-5 Piezometer					
Well Purging Date Purged: Purge Metho	d: Disposable bai	ler/other_6	raled	Field Tech(s): Weather Condit	Tanya f	Thoual 7015		-		
Casing Mater Well Diamete Total Depth: Depth to Wat Water Colum Water Colum	rial: er: er: n:	23.39 7.15 16.24	in. If from TOC	Volume Factor (VF) 80% Recovery	3/4" = 0.02 1" = 0.04(4" = .66 5" = 1.02 from TOC: = Total D	2" = 16 3" = 38 6" = 1.50 12" = 5.80 epth - (Water Colum	nn X .8) =] (10.39 7.92	i)	
Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature	Specific Conductivity (uS/cm)	рН	Turbidity (NTUs)	Color/Clarity	Other	Other
1621	0 2.0	(7.1	98	160.3	25.7	7.1	280	1		
11.34	1 50	4.4	89	16.2	25.6		260			
1/20	2 7.3	5.1	37	16.6	24.4	9.5				
1620	1 1 2				37.4	9.7	400			
1670	3 8.0	60	31	16.0	24.0	6.9	1990			
	4									
								<u> </u>		
Sample Type	d: 2/11/0' thod: Disposable	Bailer/Other_	Balled	Preservation	I		Analysis			Time
MNS	3		mL VOA	Ice/HCI	TPHg (8015) BTEX					1634
	1	A 1100 1 1	L Amber	None	TRPH (1664)	10021)				1017
	1			None	TPHd (8015M)					-
	1)-mL Poly	HNO3						
	<u> </u>	500	-IIIL POIY	HNU3	Total Lead (6010)					
Comments _									Vo	1 (7.8)
Signature	Tanje J	ahou		Date 2/11	105					

Unocal No. 813

ENSR No.

GROUNDWATER SAMPLING DATA SHEET

Site Address: 122 Leslie St., Ukiah, CA

06940-264-100

Well Purging Date Purged: Purge Method	1: 2/11/05 d: Disposable bai	ler/other_B	aled	Field Tech(s):_	Tanya Ahe tions: Dusk	60'S		_·		
Casing Mater Well Diamete Total Depth: Depth to Water Water Column Water Column	er: er: n:	7.6	ft from TOC	Volume Factor (VF)	3/4" = 0.02 1" = 0.04(2" = .16) 3" = .38 6" = 1.50 12" = 5.80] (10.95) 1.29		
Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pН	Turbidity (NTUs)	Color/Clarity	Other	Other
1748	0 1.0	5.6	-9	16.4	28.5	Т				
1750	1 3.7	32	-71	14-5	31.9	(a. 3	105	 		
1752	2 6.3	3.1	-18	14.5	32.2	6.4	250	 		
1755	3 9.0	3.0	-17	105	32.2	0.4	300			
	4						100			
		`								
Sample Colle Date Sampled Sampling Metl Sample Type:	l:_ <i>2 11 05</i> hod: Disposable I	Bailer/Other_	Baled					<u> </u>		
Sample ID	# of containers	Conta	niner Type	Preservation	Γ		A			
mw-1	3			Ice/HCI	TPHg (8015) BTEX		Analysis			Time
	1			None	TRPH (1664)	(8021)				1800
7	1			None	TPHd (8015M)					
1	1			HNO3	Total Lead (6010)					
			•	1.100	1047 2044 (0010)					
Comments									Vo	(5.9)
Signature	Tanja J C	Mount		Date2/	05		· .			

Well/Piezo ID: MW-1

Piezometer

WellX

ATTACHMENT C

LABORATORY ANALYTICAL RESULTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

3249 Fitzgerald Road Rancho Cordova, CA 95742

February 21, 2005

CLS Work Order #: COB0432 COC #: None

Mark Naugle ENSR - Sacramento 10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Name: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.

Enclosed are the results of analyses for samples received by the laboratory on 02/12/05 11:10. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

incerely,

James Liang, Ph.D. Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

02/21/05 14:32

ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca. CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (COB0432-01) Water	Sampled: 02/11/05 18:00	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-2 (COB0432-02) Water	Sampled: 02/11/05 17:08	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-3 (COB0432-03) Water	Sampled: 02/11/05 16:16	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-4 (COB0432-04) Water	Sampled: 02/11/05 15:51	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-5 (COB0432-05) Water	Sampled: 02/11/05 16:42	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	_
MW-6 (COB0432-06) Water	Sampled: 02/11/05 15:14	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-7 (COB0432-07) Water	Sampled: 02/11/05 18:21	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-8 (COB0432-08) Water	Sampled: 02/11/05 15:32	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	
MW-9 (COB0432-09) Water	Sampled: 02/11/05 14:40	Received:	02/12/05	5 11:10					
Silica Gel Treated HEM (SGT-	HEM) ND	5.0	mg/L	1	CO01195	02/15/05	02/15/05	EPA 1664 w/ SGT	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100

COC #: None

Project Manager: Mark Naugle

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (COB0432-01) Water	Sampled: 02/11/05 18:00	Received:	02/12/05	5 11:10					
Diesel	11	0.25	mg/L	5	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-2 (COB0432-02) Water	Sampled: 02/11/05 17:08	Received:	02/12/05	11:10					
Diesel	0.34	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-3 (COB0432-03) Water	Sampled: 02/11/05 16:16	Received:	02/12/05	11:10					
Diesel	0.23	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-4 (COB0432-04) Water	Sampled: 02/11/05 15:51	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-5 (COB0432-05) Water	Sampled: 02/11/05 16:42	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-6 (COB0432-06) Water	Sampled: 02/11/05 15:14	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-7 (COB0432-07) Water	Sampled: 02/11/05 18:21	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-8 (COB0432-08) Water	Sampled: 02/11/05 15:32	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	
MW-9 (COB0432-09) Water	Sampled: 02/11/05 14:40	Received:	02/12/05	11:10					
Diesel	ND	0.050	mg/L	1	CO01188	02/15/05	02/15/05	EPA 8015M	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (COB0432-01) Water	Sampled: 02/11/05 18:00	Received:	02/12/05	5 11:10					
Gasoline	610	50	μg/L	1	CO01246	02/16/05	02/16/05	8015M/8021B	D-12, GAS-1
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	0.62	0.50	"	"	"	"	"	"	
Ethylbenzene	2.5	0.50	"	"	"	"	"	"	
Xylenes (total)	3.4	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Ga	as)	156 %	65-	-135	"	"	"	"	S-04
MW-2 (COB0432-02) Water	Sampled: 02/11/05 17:08	Received:	02/12/05	5 11:10					
Gasoline	84	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	GAS-1
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	0.87	0.50	"	"	"	"	"	"	
Ethylbenzene	1.5	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Ge	as)	136 %	65-	-135	"	"	"	"	S-04
MW-3 (COB0432-03) Water	Sampled: 02/11/05 16:16	Received:	02/12/05	5 11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	0.59	0.50	"	"	"	"	"	"	
Ethylbenzene	0.82	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Ga	as)	102 %	65-	-135	"	"	"	"	
MW-4 (COB0432-04) Water	Sampled: 02/11/05 15:51	Received:	02/12/05	5 11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	11	
Surrogate: o-Chlorotoluene (Ga	as)	97.5 %	65-	-135	"	"	"	"	

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ENSR - Sacramento

10411 Old Placerville Rd., Suite 210

Sacramento, CA 95827-2508

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-5 (COB0432-05) Water	Sampled: 02/11/05 16:42	Received:	02/12/05	11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Go	as)	92.0 %	65-	-135	"	"	"	"	
MW-6 (COB0432-06) Water	Sampled: 02/11/05 15:14	Received:	02/12/05	11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Go	as)	93.5 %	65-	-135	"	"	"	"	
MW-7 (COB0432-07) Water	Sampled: 02/11/05 18:21	Received:	02/12/05	11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Go	as)	95.5 %	65-	-135	"	"	"	"	
MW-8 (COB0432-08) Water	Sampled: 02/11/05 15:32	Received:	02/12/05	5 11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	m .	
Toluene	ND	0.50	"	"	"	"	"	m .	
Ethylbenzene	ND	0.50	"	"	"	"	"	m .	
Xylenes (total)	ND	1.0	"	"	"	"	"	n	
Surrogate: o-Chlorotoluene (Go	as)	100 %	65-	-135	"	"	"	"	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca. CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (COB0432-09) Water	Sampled: 02/11/05 14:40	Received:	02/12/05	11:10					
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (G	(as)	87.5 %	65-	135	"	"	"	"	
QA (COB0432-10) Water S	ampled: 01/25/05 12:00 R	Received: 02/	/12/05 11:	:10					HT-1
Gasoline	ND	50	μg/L	1	CO01191	02/15/05	02/15/05	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	n .	
Toluene	ND	0.50	"	"	"	"	"	n .	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (G	(as)	94.0 %	65-	135	"	"	"	"	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (COB0432-01) Water	Sampled: 02/11/05 18:00	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-2 (COB0432-02) Water	Sampled: 02/11/05 17:08	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-3 (COB0432-03) Water	Sampled: 02/11/05 16:16	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-4 (COB0432-04) Water	Sampled: 02/11/05 15:51	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-5 (COB0432-05) Water	Sampled: 02/11/05 16:42	Received:	02/12/05	5 11:10					
Lead	5.3	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-6 (COB0432-06) Water	Sampled: 02/11/05 15:14	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-7 (COB0432-07) Water	Sampled: 02/11/05 18:21	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-8 (COB0432-08) Water	Sampled: 02/11/05 15:32	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	
MW-9 (COB0432-09) Water	Sampled: 02/11/05 14:40	Received:	02/12/05	5 11:10					
Lead	ND	5.0	μg/L	1	CO01125	02/14/05	02/14/05	EPA 200.8	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CO01195 - Solvent Extract		-								
Blank (CO01195-BLK1)				Prepared	& Analyzo	ed: 02/15/0	05			
Silica Gel Treated HEM (SGT-HEM)	ND	5.0	mg/L							
LCS (CO01195-BS1)				Prepared	& Analyze	ed: 02/15/0	05			
Hexane Extractable Material (HEM)	40.5	5.0	mg/L	40.0		101	80-120			
LCS Dup (CO01195-BSD1)				Prepared	& Analyze	ed: 02/15/0	05			
Hexane Extractable Material (HEM)	40.1	5.0	mg/L	40.0		100	80-120	0.993	20	

CA DOHS ELAP Accreditation/Registration Number 1233

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210

Project Number: 06940-264-100

COC #: None

Sacramento, CA 95827-2508

Project Manager: Mark Naugle

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CO01188 - EPA 3510B GCNV										
Blank (CO01188-BLK1)				Prepared	& Analyze	ed: 02/15/	05			
Diesel	ND	0.050	mg/L	·	·			·		
LCS (CO01188-BS1)				Prepared	& Analyze	ed: 02/15/	05			
Diesel	2.32	0.050	mg/L	2.50		92.8	65-135			
LCS Dup (CO01188-BSD1)				Prepared	& Analyze	ed: 02/15/	05			
Diesel	2.41	0.050	mg/L	2.50		96.4	65-135	3.81	30	

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Gas/BTEX by GC PID/FID - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CO01191 - EPA 5030 Water GC										
Blank (CO01191-BLK1)				Prepared	& Analyze	ed: 02/15/0	05			
Gasoline	ND	50	μg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	20.2		"	20.0		101	65-135			
Surrogate: o-Chlorotoluene (Gas)	19.9		"	20.0		99.5	65-135			
LCS (CO01191-BS1)				Prepared	& Analyze	ed: 02/15/0	05			
Gasoline	549	50	μg/L	500		110	65-135			
Surrogate: o-Chlorotoluene (Gas)	22.2		"	20.0		111	65-135			
LCS Dup (CO01191-BSD1)				Prepared	& Analyze	ed: 02/15/0	05			
Gasoline	485	50	μg/L	500		97.0	65-135	12.4	30	
Surrogate: o-Chlorotoluene (Gas)	19.4		"	20.0		97.0	65-135			
Matrix Spike (CO01191-MS1)	Sou	ırce: COB04	32-09	Prepared	& Analyze	ed: 02/15/0	05			
Gasoline	492	50	μg/L	500	ND	98.4	65-135			
Surrogate: o-Chlorotoluene (Gas)	20.8		"	20.0		104	65-135			
Matrix Spike Dup (CO01191-MSD1)	Sou	ırce: COB04	32-09	Prepared	& Analyze	ed: 02/15/0	05			
Gasoline	520	50	μg/L	500	ND	104	65-135	5.53	30	
Surrogate: o-Chlorotoluene (Gas)	21.7		"	20.0		108	65-135			
Batch CO01246 - EPA 5030 Water GC										
Blank (CO01246-BLK1)				Prepared	& Analyze	ed: 02/16/0	05			
Gasoline	ND	50	μg/L	•						
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes					
Batch CO01246 - EPA 5030 Water GC															
Blank (CO01246-BLK1)	Prepared & Analyzed: 02/16/05														
Surrogate: o-Chlorotoluene (BTEX)	20.3		μg/L	20.0		102	65-135								
Surrogate: o-Chlorotoluene (Gas)	19.6		"	20.0		98.0	65-135								
LCS (CO01246-BS1)				Prepared	& Analyz	ed: 02/16/	05								
Benzene	21.7	0.50	μg/L	20.0		108	70-140								
Toluene	21.0	0.50	"	20.0		105	70-140								
Ethylbenzene	20.4	0.50	"	20.0		102	70-140								
Xylenes (total)	62.2	1.0	"	60.0		104	70-140								
Surrogate: o-Chlorotoluene (BTEX)	19.7		"	20.0		98.5	65-135								
LCS Dup (CO01246-BSD1)	Prepared & Analyzed: 02/16/05														
Benzene	22.1	0.50	μg/L	20.0		110	70-140	1.83	30						
Toluene	20.9	0.50	"	20.0		104	70-140	0.477	30						
Ethylbenzene	20.4	0.50	"	20.0		102	70-140	0.00	30						
Xylenes (total)	62.7	1.0	"	60.0		104	70-140	0.801	30						
Surrogate: o-Chlorotoluene (BTEX)	19.9		"	20.0		99.5	65-135								
Matrix Spike (CO01246-MS1)	So	urce: COB04	57-04	Prepared & Analyzed: 02/16/05											
Benzene	22.0	0.50	μg/L	20.0	ND	110	60-140								
Toluene	21.2	0.50	"	20.0	0.63	103	60-140								
Ethylbenzene	20.3	0.50	"	20.0	ND	102	60-140								
Xylenes (total)	61.5	1.0	"	60.0	ND	102	60-140								
Surrogate: o-Chlorotoluene (BTEX)	19.7		"	20.0		98.5	65-135								
Matrix Spike Dup (CO01246-MSD1)	So	urce: COB04	57-04	Prepared	Prepared & Analyzed: 02/16/05										
Benzene	22.3	0.50	μg/L	20.0	ND	112	60-140	1.35	30						
Toluene	21.0	0.50	"	20.0	0.63	102	60-140	0.948	30						
Ethylbenzene	20.6	0.50	"	20.0	ND	103	60-140	1.47	30						
Xylenes (total)	62.4	1.0	"	60.0	ND	104	60-140	1.45	30						
Surrogate: o-Chlorotoluene (BTEX)	19.8		"	20.0		99.0	65-135								

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ENSR - Sacramento

Project: Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432

10411 Old Placerville Rd., Suite 210 Sacramento, CA 95827-2508

Project Number: 06940-264-100 Project Manager: Mark Naugle

COC #: None

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes					
rmaryte	Result	Dillit	Cinto	Level	Result	/UKLC	Limits	МЪ	Limit	110103					
Batch CO01125 - EPA 3020A															
Blank (CO01125-BLK1)				Prepared & Analyzed: 02/14/05											
Lead	ND	5.0	μg/L												
LCS (CO01125-BS1)															
Lead	102	5.0	μg/L	100		102	80-120								
LCS Dup (CO01125-BSD1)	Prepared & Analyzed: 02/14/05														
Lead	102	5.0	μg/L	100		102	80-120	0.00	20						
Matrix Spike (CO01125-MS1)	So	urce: COB03	345-01	Prepared	& Analyz	ed: 02/14/	05								
Lead	106	5.0	μg/L	100	ND	106	75-125								
Matrix Spike Dup (CO01125-MSD1)	rix Spike Dup (CO01125-MSD1) Source: COB0345-01						Prepared & Analyzed: 02/14/05								
Lead	106	5.0	ug/L	100	ND	106	75-125	0.00	25						

CA DOHS ELAP Accreditation/Registration Number 1233

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Frmr. Unocal #0813, 122 Leslie St. Ukiah, Ca.
CLS Work Order #: COB0432 ENSR - Sacramento Project: 10411 Old Placerville Rd., Suite 210 Project Number: 06940-264-100 COC #: None Sacramento, CA 95827-2508

Project Manager: Mark Naugle

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

HT-1 The sample was received outside of the EPA recommended holding time.

GAS-1 Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent

with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.

D-12 Results in the Gasoline Range are primarily due to overlap from a heavier fuel hydrocarbon product.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD



CHAIN OF CUSTODY

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Lab: CLS

TAT: Standard

Report results to: Name Company Mailing Address City, State, Zip	Mark Naugle ENSR 10411 Old Placerville Road Sacramento, CA 95827-2508										S	Site A	ct Inform ddress:	122 Leslie St., Ukia 06940-264-100	h, CA	
Telephone No.	916-362-7	AND RESIDENCE THE PARTY OF THE	7-2300										al No. Il ID No.	813 T0604593441		
	916-362-81	Analyses Requ								II ID NO.	7					
Special instructions and/or	specific regular	ory requireme	nts:		8015	8021B	1664	Lead 6010	8015							utive
Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts.	TPHg 8	BTEX 8	TRPH 1	Total Le	TPHd 8					Sample Conditio	n/Comments	Preservative
MW-1	2/11/05	18:00	GW	6	Х	Х	Х	X	Х							HCI/HNO3
MW-2	2/11/05	17.08	GW	6	Х	Х	X	X	Х							HCI/HNO3
MW-3	2/11/05	1616	GW	6	X	X	Х	X	X						Average 12 and	HCI/HNO3
MW-4	2/11/05	1551	GW	6	Х	Х	Х	X	X							HCI/HNO3
MW-5	2/11/05	1642	GW	6	Х	X	X	X	X							HCI/HNO3
MW-6	2/11/05	1514	GW	6	Х	X	Х	X	X							HCI/HNO3
MW-7	411105	1821	GW	6	Х	X	Х	Х	X					T 100 100 100 100 100 100 100 100 100 10		HCI/HNO3
MW-8	2/11/05	1532	GW	6	Х	Х	Х	Х	X							HCI/HN03
MW-9	2/11/05	1440	GW	6	Х	X	X	Х	X							HCI/HN03
QA	1/25/05	1200	Liquid	2	Х	Х										HCI
Collected by: Relinquished by: Relinquished by: Method of Shipment:	lanya A	guy y	Date/Time Date/Time Date/Time	2/12/	05 V		35	Rec	eive eive	ed by		1	Rept:	2 (Krounts)	Date/Time 2/1/ Date/Time Date/Time	1/05/8